

REMARKS

The present invention relates to a method for discharging current from a gas diffusion electrode.

In the Office Action of March 31, 2008, the Examiner has maintained the prior art rejections under 35 U.S.C. §§ 102(e) and 103(a), all of which are based on the Gestermann reference (U.S. Patent 6,841,047) as a primary reference. The non-statutory obviousness-type double patenting rejections of claim 1 have also been maintained.

Applicant respectfully traverses, and requests the Examiner's reconsideration and withdrawal of the rejections, and the allowance of claims 1 - 5, for the reasons set forth below.

Prior Art Rejections

The present invention intends to discharge current from a gas diffusion electrode to a chamber wall; therefore the gas diffusion electrode and the chamber wall are required to be electrically connected with each other.

On the other hand, in the Gestermann reference (U.S. Patent 6,841,047), as shown in Fig. 1, helical springs 18 and connecting pieces 20 are positioned between a current collector 10 and a back wall 14, thereby pressing the current collector 10 toward a gas diffusion electrode 32. However, neither the back plate nor the connecting pieces are electro-conductive; therefore no current can be discharged from the gas diffusion electrode in Gestermann patent, wherein only

the anode frame and the cathode frame are described to be electro-conductive (see column 3, lines 9 to 11).

It is absolutely necessary that connecting pieces 20 between the gas diffusion electrode 32 and the back wall 14 shown in Fig. 1 of Gestermann reference be electro-conductive for discharging current from the gas diffusion electrode 32 toward the back wall 14. However, the Gestermann reference is silent in that regard. Clearly there is no anticipation by Gestermann, and it is respectfully submitted that the rejections of claims 1 and 5 for alleged anticipation by Gestermann should now be withdrawn, and claims 1 and 5 allowed forthwith.

The configuration defined in claim 2 may appear to be similar to that described in U.S. Patent Publication Application 2005/0173257A1 (Bulan). However, claim 2 includes all of the requisites of claim 1; accordingly the invention as defined in claim 2 is also unobvious.

Next, claims 3 and 4 further define the ways of pressing the gas diffusion electrode toward the electric connecting element. On the other hand, the Sakata reference does not disclose these features. Therefore, even considering Gestermann in view of Sakata, claims 3 and 4 are non-obvious and patentable.

Double Patenting

Applicant respectfully submits that the double patenting rejections are baseless. The essential features of claim 8 of U.S. Patent 6,383,349 are “to bring the cathode collector frame (63) into contact with the meshed metallic material (62) and electrically connect these”, and

judged from the description from column 10, line 59 to column 11, line 20, both the cathode collector frame (63) and the meshed metallic material (62) are recognized as part of the gas diffusion electrode (61).

In order to supply current to a cathode chamber frame conductor 95 through a cathode collector frame 93 and a meshed metallic material 94 as shown in Figs, 10 and 11 which correspond to claim 8 of U.S. Patent 6,383,349, pressure is applied in a gas chamber 92 to obtain good contact between the cathode collector frame 93 and the meshed metallic material 94.

On the other hand, as mentioned above, claim 1 of the present application intends to conduct excellent current discharge. In order to achieve this purpose, the gas diffusion electrode is electrically connected with the electro-conductive chamber wall. The uses of the alkali-proof glue, the filling material, and the pressure all facilitate the smooth current discharge.

As described, the purposes and the configurations of claim 1 of the present application and claim 8 of U.S. Patent 6,383,349 are quite different from each other, so Applicant respectfully submits that double-patenting does not exist between claim 1 of the present application and claim 8 of U.S. Patent 6,383,349.

Analogously, the rejection of claim 1 for non-statutory obviousness-type double-patenting based on U.S. Patent 6,372,102 (Sakata '102) in view of Gestermann should also now be withdrawn.

In view of the above, reconsideration and allowance of pending claims 1 - 5 of this application are now believed to be in order, and such actions are hereby earnestly solicited.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the local Washington, D.C. telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Joseph J. Ruch, Jr.
Registration No. 26,577

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
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